

Question bank

microcontroller

Answer following in brief.

- ① What are the differences between microprocessor and microcontroller.
- ② Explain function of A & B register in multiplication and division operation.
- ③ Explain function of various flags in PSW register. ~~and d1~~
- ④ Explain bit addressable area of internal RAM.
- ⑤ Explain function of DPTR.
- ⑥ Explain function of PC.
- ⑦ Explain alternate function of P0 and P2.
- ⑧ Explain what are the address register banks of 8051
- ⑨ Explain ~~any~~ two instructions
- ⑩ (Any two instructions will be asked)
- ⑪ Explain function of following Pins
- ⑫ (Any two Pins will be asked)

Q2 Answer following in detail.

- ① Draw and explain architecture of 8051
- ② Draw and explain programming model of 8051
- ③ Explain memory organisation of 8051
- ④ List all the SFRs of 8051 and explain any five SFRs in detail

Q3 Programs

- ① Finding average of 6 nos.
- ② Transferring block of data from one memory location to other memory location
- ③ Convert Hex no. to BCD no.
- ④ Convert unpacked BCD no to A-two ASCII nos.
- ⑤ Interface 8 LEDs of 8051 and write a program to glow alternate LEDs on/off continuously.
- ⑥ Interface 8 LEDs of 8051 and write a program to glow LEDs in rotating sequence.